

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,962	11/13/2003	Anthony Anthony	X2YA0041U-US	6713
31518 7:	590 02/14/2005		EXAMI	NER
NEIFELD IP LAW, PC			MULLINS, BURTON S	
2001 JEFFERSON DAVIS HIGHWAY ARLINGTON, VA 22202			ART UNIT	PAPER NUMBER
	,,,,		2834	

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/705,962	ANTHONY ET AL.				
Office Action Summary	Examiner	Art Unit				
	Burton S. Mullins	2834				
The MAILING DATE of this communication appeariod for Reply	ppears on the cover sheet with	the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by statu. Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	I. 1.136(a). In no event, however, may a repl 2. In the statutory minimum of thirty (3 3. In the statutory minimum of thirty (4 4. In the statutory minimum of thirty (5 4. In the statutory minimum of thirty (6 4. In the statutory minimum of	y be timely filed 30) days will be considered timely. S from the mailing date of this communication. DONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
2a) ☐ This action is FINAL . 2b) ☑ Th	is action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-18 is/are pending in the application 4a) Of the above claim(s) 5-18 is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and are subject.	wn from consideration.					
Application Papers						
9)⊠ The specification is objected to by the Examir	ner.					
10)☐ The drawing(s) filed on is/are: a)☐ ac)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to th	* ' '	• •				
Replacement drawing sheet(s) including the corre		•				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure. * See the attached detailed Office action for a list	nts have been received. nts have been received in App ority documents have been re au (PCT Rule 17.2(a)).	lication No ceived in this National Stage				
Attachment(s)	∆ □ •	(DTO 442)				
1) ⊠ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)	ımary (PTO-413) 1ail Date				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	5) Notice of Infor 6) Other:	mal Patent Application (PTO-152)				

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements submitted on 22 April 2004, 23 April 2004 and 29 April 2004 have been considered by the examiner.

Specification

- 2. The disclosure is objected to because of the following informalities: Applicant is requested to check the paragraph breaks in the specification, some of which appear to be inappropriate, e.g., p.30, lines 8-9.
- 3. Claims 5-18 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from a multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 5-18 have not been further treated on the merits.

Claim Rejections - 35 USC § 112

4. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, recitation "each of the non-inductive capacitors" is indefinite since it does not correspond to the singular "the capacitor" in the preceding phrase. If the capacitor 72 (Fig.3) is actually two or more capacitors, i.e. a "double non-inductive capacitor" (borrowing claim 3 language) the claim language should reflect this. Further, it is not clear from the claim whether

the recited "capacitor of the filtering and interference suppression device" is the same as the "a capacitor, one terminal of which is electrically connected to a strip conductor...."

In claim 2, recitation "with interposition of a capacitor" is vague. Does this mean a capacitor is between the second brush and ground?

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-4, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bates (GB 2,217,136) in view of Sakamoto et al. (US 5,420,553). Bates teaches applicant's basic filtering and interference suppression device structure for an electric motor comprising: at least a first powering brush 11 for an armature commutator of the electric motor 10, a capacitor 28, one terminal of which is electrically connected to a strip conductor or lead 36 that electrically powers the first brush powering the armature commutator of the electric motor, and another terminal (see Fig.2) of which is electrically connected to a ground strip conductor (not numbered, see Fig.2), connected, in turn, to an electrical ground of the electric motor, characterized in that the capacitor/s 28/30 is/are directly attached to a circuit board (not shown; p.6, lines 2-18) including strip conductors, of which there is at least one powering strip conductor for a brush and one ground strip conductor.

Bates differs in that the capacitor/s 28/30 is/are not non-inductive capacitors, per se.

Art Unit: 2834

Sakamoto teaches a noise filter 12 (Fig. 8) for suppressing electromagnetic interference including a non-inductive capacitor comprising a dielectric substrate 14, electrodes 20A/20B and ground patterns 18A/18B. Sakamoto's filter does not have an inductive component and therefore cannot cause any resonance or secondary noise emission (c.1, lines 48-51).

It would have been obvious to employ a non-inductive capacitor per Sakamoto in the noise suppression apparatus of Bates since it would have been desirable to eliminate inductive components which could cause resonance.

Regarding claim 2, as best understood, Bates teaches a second powering brush 13 which is connected to the electrical ground of the motor (Fig. 2), with a capacitor 30 between the brush 13 and ground (Fig.2), and one terminal of the capacitor is connected to a strip conductor electrically powering the corresponding brush (Fig.2), and the other ground terminal of which is connected to the ground (Fig.2).

Regarding claim 3, the plural shapes and plurality of electrodes suggested by Sakamoto would comprise multiple filtering and interference, non-inductive suppression capacitors in the form of a double non-inductive capacitor.

Regarding claim 4, the brush-bearing board in Bates forms the printed circuit board described at p.6, lines 2-18.

Interference

The following claim number one (1) from U.S. Patent No. 6,717,301 (related to US 7. Publication 2003-00048029) is suggested to applicant under 35 U.S.C. 135(a) for the purposes of an interference:

Art Unit: 2834

A filtering and interference suppression device for an electric motor comprising; a first powering brush for an armature commutator of the electric motor; a non-inductive capacitor, having a first terminal electrically connected to a strip conductor that electrically powers the first powering brush, and a second terminal electrically connected to a ground strip conductor, connected, in turn, to an electrical ground of the electric motor, wherein the non-inductive capacitor is directly attached to a circuit board including the strip conductors; and a choke connected in series on the ground strip between a ground terminal of the non-inductive capacitor and the first powering brush.

The suggested claim must be copied exactly, although other claims may be proposed under 37 CFR 1.605(a).

Applicant is given ONE MONTH or THIRTY DAYS, whichever is longer, from the mailing date of this communication to copy this patent claim. Failure to do so will be considered a concession that the subject matter of this claim is the prior invention of another under 35 U.S.C. 102(g), and thus also prior art under 35 U.S.C. 103(a) (In re Oguie, 517 F.2d 1382, 186 USPQ 227 (CCPA 1975)), but will not result in the abandonment of this application. THE PROVISIONS OF 37 CFR 1.136 DO NOT APPLY TO THE TIME SPECIFIED IN THIS ACTION.

Conclusion

- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029.

 The examiner can normally be reached on Monday-Friday, 9 am to 5 pm.
- 9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information

Art Unit: 2834

regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Burton S. Mullins Primary Examiner Art Unit 2834

bsm 07 February 2005